

## Path Not Found:

### Disparities in Access to Computer Science Courses in California High Schools

In California public high schools\*:

Over **75%** of schools with the highest percentage of **low-income students** offer **no** computer science courses.

Only **4%** of schools with the highest percentage of **low-income students** offer **AP Computer Science**.

In Silicon Valley's backyard, under **2%** of students are enrolled in computer science (SFUSD & OUSD).

Nearly **75%** of schools with the highest percentage of underrepresented **students of color** offer **no** computer science courses.

Just **2%** of schools with the highest percentage of underrepresented students of color offer **AP Computer Science**.

Of the more than **half a million** high school students in the largest 20 districts, just **1%** are in any computer science course.

African-American and Latino students make up **59%** of California public school students but were just **11%** of 2014 **AP Computer Science** test takers.

\*See *Path Not Found* full report for detailed data, sources, and recommendations.

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## Promising Practices Highlights

*A few programs and initiatives in California aiming to improve access to computer science*

**Los Angeles Unified School District** partners with the **Exploring Computer Science** program to provide curricula and professional development to educators teaching the year-long Exploring Computer Science course at nearly 40 LAUSD high schools, exposing over 2,300 high schools students—the majority of whom are from groups traditionally underrepresented in computer science—to an engaging and culturally relevant computer science curriculum. This program has achieved strong outcomes and has impacted student interest in computer science.

**San Francisco Unified School District** also partners with **Code.org** to broaden computer science access. Additionally, SFUSD is crafting an initiative to make computer science compulsory for all students in grades Pre-K through 8 and to expand computer science opportunities at all district high schools.

**Oakland Unified School District**, in partnership with **Level Playing Field Institute**, co-founded a Computer Science Working Group comprised of administrators, non-profit partners, and district math, science, and computer science teachers. This group worked collaboratively to assess computer science educational assets and challenges, to pilot computer science professional development programs, and to offer specific recommendations aimed at strengthening computer science offerings throughout the district.

**Level Playing Field Institute** implements computer science initiatives in Northern and Southern California designed to provide underrepresented students opportunities for exposure, engagement, and technical skill development within the field of computer science. These programs include **National Science Foundation**-funded rigorous computer science coursework for 9-12th grade students in **SMASH** (Summer Math and Science Honors Academy), computer science exposure for African-American middle school boys in SMASH: Prep, and Hackathons to increase exposure and “Level the Coding Field” for 6-12th grade students.

**Hidden Genius Project** trains African-American young men in technology creation, entrepreneurship, and leadership skills in order to transform their communities and create career pathways.

**University of California, Berkeley** instructors who developed the popular “Beauty and Joy of Computing” (BJC) class have created an online version of the course, called BJCx, launching September 2015. BJC was twice chosen as a national pilot for the upcoming Advanced Placement Computer Science Principles course designed to broaden participation in groups traditionally underrepresented in computing.

**Alliance for California Computing Education for Students and Schools (ACCESS)** is a statewide network of computer scientists, K-12 teachers, professors, educational policy advocates, and industry professionals dedicated to providing all California students with high-quality computer science education, ensuring that computer science education is available to all students, specifically for traditionally underrepresented students including girls, low-income students, and students of color. ACCESS is engaged in tracking, supporting, and monitoring the implementation of bills and ensuring that California’s computer science education legislation will fulfill its potential for expanding participation in computer science and ensuring its accessibility to all students.

